

IN THE SPECIFICATION:

Please replace Page 4, lines 12-33 with the following:

Figure 1 shows a cross-section through a front section of a tap 10 according to the present invention. The tap 10 is fluteless, although it may have one or more lubrication grooves. The tap 10 has a thread 11 which is triangular in form. The angle α of the thread 11 is 30° (i.e. a half-angle of 15°) and the thread has a pitch of 1mm with a tolerance of 0.005 mm. The tap 10 has a chamfer of four threads 12-15 with a chamfer angle β of 6° . The tap 10 has crests 16 which are each rounded with a radius (when viewed in an axially extending cross-section – Figure 1) of 0.169 mm. The roots 17 are each rounded with a radius (when viewed in an axially extending cross-section – Figure 1) of ~~0.83mm~~ 0.183mm. The roots 17 are separated by 36° (plus or minus 1°) when viewed in a transverse cross-section as in Figure 3; there are five lands 18-22. As seen in Figure 4, the tap 10 has a threaded portion 23, a shank portion 24 and a square cross-section portion 25 to be engaged by a chuck. The distance between the end 25A of the square section 25 and the beginning of the threads on the threaded portion 23 is defined to a close tolerance.

Please replace page 5, lines 12-28 with the following:

Above the angle of thread is given as 30° (15° half angle) and this is preferred because it is ideal for the generation of translational motion when interacting with a matched male thread. However, angles in the range of 29° - 40° (14.5° - 20° half angles) would also work well. The radius of each root 17 will be determined as a proportion of thread depth. In the identified example the root radius ~~0.83mm~~ 0.183mm is approximately 20% of the thread depth of 0.924mm. The percentage must be sufficient to allow for material flow into the thread without the material completely filling the thread. Whilst above the tap 10 has two start points and two co-extending helical threads, it may in some circumstance be preferred to have three start points and three co-extending helical threads. Whilst above the roots 17 are shown as rounded, this is not essential and they could be e.g. flat-bottomed.